

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-39. (Canceled)

40. (Currently Amended) An isolated polynucleotide comprising a polynucleotide sequence selected from the group consisting of:

- a) a polynucleotide sequence encoding an amino acid sequence of SEQ ID NO:2,
- b) a polynucleotide sequence encoding an allelic or recombinant variant of the amino acid sequence of SEQ ID NO:2, wherein said variant **has chemotactic activity and:**
 - i. has an insertion or deletion of 1-5 amino acids as compared with SEQ ID NO:2; and/or
 - ii. has at least one amino acid substitution as compared with SEQ ID NO:2; or
 - iii **a combination of (i) and (ii)** ~~and further wherein said variant has chemotactic activity,~~
- ~~e) a polynucleotide encoding a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID NO:2, wherein said fragment has chemotactic activity;~~
- ~~d) a polynucleotide encoding an immunogenically active fragment of a polypeptide having an amino acid sequence of SEQ ID NO:2, wherein said immunogenically active fragment is capable of generating an antibody that specifically binds to the polypeptide of SEQ ID NO:2 or said allelic or recombinant variant thereof;~~
- e) c) a polynucleotide sequence fully complementary along its length to a),
- f) d) a polynucleotide sequence fully complementary along its length to b), and
- ~~g) a polynucleotide sequence fully complementary along its length to e);~~
- ~~h) a polynucleotide sequence fully complementary along its length to d), and~~
- i) e) a ribonucleotide equivalent of a)-~~h~~ d).

41. (Previously Presented) An isolated polynucleotide of claim 40, having a sequence of SEQ ID NO:1.

Claims 42-45. (Canceled).

46. (Previously Presented) A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 40.

47. (Previously Presented) A cell transformed with a recombinant polynucleotide of claim 46.

Claims 48-51 (Cancelled).

52. (Currently Amended) An isolated polynucleotide comprising a sequence selected from the group consisting of:

- a) a polynucleotide sequence of SEQ ID NO:1,
- b) a naturally-occurring polynucleotide sequence variant of SEQ ID NO:1, wherein said variant **has chemotactic activity**, encodes an amino acid sequence of SEQ ID NO:2, and wherein said variant:
 - (i) differs** by an insertion or deletion of 1-5 amino acids as compared with SEQ ID NO:2; ~~and/or~~
 - (ii) differs** by substitution of ~~at least~~ one amino acid as compared with SEQ ID NO:2, ~~and further wherein said variant has chemotactic activity,~~ **or**
 - (iii) a combination of (i) and (ii),**
- c) a polynucleotide sequence fully complementary along its length to a),
- d) a polynucleotide sequence fully complementary along its length to b), and
- e) a ribonucleotide equivalent of a)-d).

53. (Currently Amended) A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 52, the method comprising:

- a) hybridizing the sample with a probe comprising a segment of at least 20 contiguous nucleotides of a polynucleotide having a sequence complementary to said target polynucleotide in the sample, wherein said probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide ~~or fragments thereof~~, and
- b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof; wherein the amount of hybridization complex corresponds to the amount of target polynucleotide in the sample.

54. (Currently Amended) A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 52, the method comprising:

- a) amplifying said target polynucleotide ~~or fragment thereof~~ using polymerase chain reaction amplification, and
- b) detecting the presence or absence of said amplified target polynucleotide ~~or fragment thereof~~, and, optionally, if present, the amount thereof; wherein the amount of amplified polynucleotide corresponds to the amount of target polynucleotide in the sample.

Claims 55-104(Cancelled).

105. (Currently Amended) An isolated polynucleotide comprising a polynucleotide sequence of claim 40, wherein the amino acid sequence encoded by the polynucleotide has

chemotactic activity and has no insertions or deletions as compared with SEQ ID NO:2, and contains one substitution as compared with SEQ ID NO:2.

106. (Currently Amended) An isolated polynucleotide comprising a polynucleotide sequence of claim 40, wherein the amino acid sequence encoded by the polynucleotide **has chemotactic activity and** contains one substitution as compared with SEQ ID NO:2.

107. (Currently Amended) An isolated polynucleotide of claim 40, consisting of a polynucleotide sequence selected from the group consisting of:

- a) a polynucleotide sequence encoding the amino acid sequence of SEQ ID NO:2,
- b) a polynucleotide sequence encoding an allelic or recombinant variant of the amino acid sequence of SEQ ID NO:2, wherein said variant **has chemotactic activity and:**
 - i. has an insertion or deletion of 1-5 amino acids as compared with SEQ ID NO:2; and/or
 - ii. has one amino acid substitution as compared with SEQ ID NO:2, **or**
 - iii. ~~and further wherein said variant has chemotactic activity~~ **a combination of (i) and (ii),**
- ~~e) a polynucleotide encoding a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID NO:2, wherein said fragment has chemotactic activity;~~
- ~~d) a polynucleotide encoding an immunogenically active fragment of a polypeptide having an amino acid sequence of SEQ ID NO:2, wherein said immunogenically active fragment is capable of generating an antibody that specifically binds to the polypeptide of SEQ ID NO:2 or said allelic or recombinant variant thereof;~~
- ~~e) c) a polynucleotide sequence fully complementary along its length to a),~~
- ~~f) d) a polynucleotide sequence fully complementary along its length to b), and~~
- ~~g) a polynucleotide sequence fully complementary along its length to e);~~
- ~~h) a polynucleotide sequence fully complementary along its length to d), and~~

i) e) a ribonucleotide equivalent of a)-~~h~~ d).

108. (Currently Amended) An isolated polynucleotide of claim 40, comprising a polynucleotide sequence selected from the group consisting of:

a) a polynucleotide sequence encoding, without introns, the amino acid sequence of SEQ ID NO:2,

b) a polynucleotide sequence encoding, without introns, an allelic or recombinant variant of the amino acid sequence of SEQ ID NO:2, wherein said variant **has chemotactic activity and:**

i) has an insertion or deletion of 1-5 amino acids as compared with SEQ ID NO:2; and/or

ii) has a substitution of one amino acid as compared with SEQ ID NO:2, **or**

iii) **a combination of (i) and (ii)** and further wherein said variant has

~~chemotactic activity,~~

~~e) — a polynucleotide encoding, without introns, a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID NO:2, wherein said fragment has chemotactic activity,~~

~~d) — a polynucleotide encoding, without introns, an immunogenically active fragment of a polypeptide having an amino acid sequence of SEQ ID NO:2, wherein said immunogenically active fragment is capable of generating an antibody that specifically binds to the polypeptide of SEQ ID NO:2 or said allelic or recombinant variant thereof,~~

e) c) a polynucleotide sequence fully complementary along its length to a),

f) d) a polynucleotide sequence fully complementary along its length to b), **and**

~~g) — a polynucleotide sequence fully complementary along its length to e),~~

~~h) — a polynucleotide sequence fully complementary along its length to d), and~~

i) e) a ribonucleotide equivalent of a)-~~h~~ d).

109. (Previously Presented) A polynucleotide of claim 40, wherein the polynucleotide is a cDNA.

110. (Previously Presented) A polynucleotide of claim 52, wherein the polynucleotide is a cDNA.